

What is claimed is:

- 1 1. A bone plate of complex form, suitable for use in osteotomy, the bone plate
2 having a longitudinal axis, a bone-contacting bottom side and a top side with at
3 least two sets of overlapping holes which communicate through the plate from the
4 top to the bottom side, wherein the sets of overlapping holes define threaded
5 apertures having multifaceted surfaces, and wherein, when applied, two sets of
6 such overlapping holes are located so as to lie on opposite sides of an osteotomy
7 site and a third hole is aligned at an angle with respect to the longitudinal axis.
- 1 2. The bone plate of claim 1, wherein the threaded apertures are positioned so as to
2 be on either side of the point of osteotomy when applied to bone and include wide
3 bevels on a far end away from the osteotomy site.
- 1 3. The bone plate of claim 1, wherein bone plate further include at least one locking
2 bone peg having a threaded head which locks with the threads of a corresponding
3 threaded aperture, thereby better ensuring rigid fixing of a fracture when using pegs
4 having a body without threads.
- 1 4. The bone plate of claim 1, wherein the multifaceted surfaces are threads. .
- 1 5. The bone plate of claim 1, wherein the bone plate includes at least one round
2 hole having a corresponding countersink, the countersink being axially offset from
3 an orientation perpendicular to the top surface by a predetermined angle.

1 6. The bone plate of claim 5, wherein the predetermined angle is approximately 25
2 degrees.

1 7. A bone plate of complex form, suitable for use in osteotomy, the bone plate
2 having

3 (a) a least two axes on which bone screw receiving holes are located
4 including a longitudinal axis and an axis substantially angled therefrom, and

5 (b) a bone-contacting bottom side and a top side with at least two sets of
6 overlapping holes which communicate through the plate from the top to the bottom
7 side, wherein the sets of overlapping holes define threaded apertures having
8 multifaceted surfaces, and wherein, when applied, two adjacent sets of such
9 overlapping holes are located so as to lie on opposite sides of an osteotomy site.

1 8. The bone plate of claim 7, wherein the threaded apertures are positioned so as to
2 be on either side of the point of osteotomy when applied to bone and include wide
3 bevels on a far end and near end with respect to the osteotomy site.

1 9. The bone plate of claim 7, wherein bone plate further accommodates at least one
2 locking bone peg having an unthreaded body and threaded head which locks with
3 the threads of a corresponding threaded aperture, thereby better ensuring rigid
4 fixing of a fracture.

1 10. The bone plate of claim 7, wherein the multifaceted surfaces are threads.

1 11. The bone plate of claim 7 wherein a distance between the threaded apertures is
2 defined to optimize either closing or opening of wedge femoral osteotomies.

1 12. The bone plate of claim 11 where the distance is approximately 15mm.

1 13. The bone plate of claim 12 where a distal end of the plate forms a natural curve
2 corresponding to the shape of the distal femur in order to minimize the potential of
3 plate overhang.

1 14. An orthopedic kit including:

2 a. A bone plate of complex form, suitable for use in osteotomy, the bone plate
3 having a longitudinal axis, a bone-contacting bottom side and a top side with at
4 least three sets of overlapping holes which communicate through the plate from the
5 top to the bottom side, wherein the sets of overlapping holes define threaded
6 apertures having multifaceted surfaces, and wherein, when applied, two adjacent
7 sets of such overlapping holes are located so as to lie on opposite sides of an
8 osteotomy site; and

9 b. at least one bone screw engageable with the bone plate.

1 15. The kit of claim 14, further comprising a drill guide having a main drill guide

2 surface and opposite end portions, one end portion of which is securely engageable
3 with the multi-faceted surface of a hole in the bone plate so as to securely hold the
4 drill guide in a desired orientation with respect to the bone plate for stabilizing a
5 drill used in an orthopedic procedure.

1 16. The kit of claim 14, wherein, when a bone plate is applied to a bone, two sets
2 of such overlapping holes are located so as to lie on opposite sides of an osteotomy
3 site and the third is aligned at approximately 60 degrees with the longitudinal axis.